

## Claims

What is claimed is:

1. A method for building an information network via an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, the method comprising:

step (a) of selecting at least one frequency not used by television broadcasting or radio broadcasting in an area where the house is located;

step (b) of modulating a carrier wave having the frequency selected in step (a) by using transmission data transmitted from a first information terminal and transmitting the modulated carrier wave via the antenna terminal or the antenna cable; and

step (c) of receiving the carrier wave transmitted in step (b) and demodulating the carrier wave to produce reception data received by a second information terminal.

2. The method according to claim 1, wherein, in step (a), at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is selected.

3. The method according to claim 1, further comprising a step of bidirectionally transmitting data between the information network via the antenna terminal or the antenna cable and another network by converting the format of the data.

4. A method for building an information network via an antenna terminal

or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, the method comprising:

step (a) of selecting a first frequency and a second frequency not used by television broadcasting or radio broadcasting in an area where the house is located;

step (b) of modulating a carrier wave having the first frequency by using transmission data transmitted from a first information terminal and transmitting the modulated carrier wave via the antenna terminal or the antenna cable; step (c) of receiving the carrier wave transmitted in step (b) and demodulating the carrier wave to produce reception data received by a second information terminal;

step (d) of modulating a carrier wave having the second frequency by using transmission data transmitted from the second information terminal and transmitting the modulated carrier wave via the antenna terminal or the antenna cable; and

step (e) of receiving the carrier wave transmitted in step (d) and demodulating the carrier wave to produce reception data received by the first information terminal.

5. The method according to claim 4, wherein, in step (a), at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is selected.

6. The method according to claim 4, further comprising a step of bidirectionally transmitting data between the information network via the antenna terminal or the antenna cable and another network by converting the format of the

data.

7. A method for building an information network via an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, the method comprising:

step (a) of selecting a plurality of frequencies not used by television broadcasting or radio broadcasting in an area where the house is located;

step (b) of dividing transmission data transmitted from a first information terminal into a plurality of channels, modulating a plurality of carrier waves having the respective frequencies selected in step (a) by using the transmission data from the plurality of channels, and transmitting the modulated carrier waves via the antenna terminal or the antenna cable; and

step (c) of receiving the carrier waves transmitted in step (b), demodulating the carrier waves to produce reception data over the plurality of channels, and integrating the reception data over the plurality of channels into a single data set which is received by a second information terminal.

8. The method according to claim 7, wherein, in step (a), at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is selected.

9. The method according to claim 7, further comprising a step of bidirectionally transmitting data between the information network via the antenna terminal or the antenna cable and another network by converting the format of the data.

10. A network connection circuit for connecting an information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting at least one frequency not used by television broadcasting or radio broadcasting in an area where the house is located; and

transmitting means for modulating a carrier wave having the frequency selected by the frequency-selecting means by using transmission data transmitted from the information terminal and transmitting the modulated carrier wave via the antenna terminal or the antenna cable.

11. The network connection circuit according to claim 11, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means.

12. A network connection circuit for connecting a first information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting at least one frequency not used by television broadcasting or radio broadcasting in an area where the house is located; and

receiving means for receiving a carrier wave which has the frequency selected by the frequency-selecting means and has been transmitted from a

second information terminal via the antenna terminal or the antenna cable and demodulating the carrier wave to produce reception data received by the first information terminal.

13. The network connection circuit according to claim 12, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means.

14. A network connection circuit for connecting a first information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting a first frequency and a second frequency not used by television broadcasting or radio broadcasting in an area where the house is located;

transmitting means for modulating a carrier wave having the first frequency selected by the frequency-selecting means by using transmission data transmitted from the first information terminal and transmitting the modulated carrier wave via the antenna terminal or the antenna cable; and

receiving means for receiving a modulated carrier wave which has the second frequency and has been transmitted from a second information terminal via the antenna terminal or the antenna cable and demodulating the carrier wave to produce reception data received by the first information terminal.

15. The network connection circuit according to claim 14, wherein at

least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means.

16. A network connection circuit for connecting an information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting a plurality of frequencies not used by television broadcasting or radio broadcasting in an area where the house is located; and

transmitting means for dividing transmission data transmitted from the information terminal into a plurality of channels, modulating a plurality of carrier waves having the respective frequencies selected by the frequency-selecting means by using the transmission data from the plurality of channels, and transmitting the modulated carrier waves via the antenna terminal or the antenna cable.

17. The network connection circuit according to claim 16, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means.

18. A network connection circuit for connecting a first information terminal to an antenna terminal or an antenna cable disposed in a house for receiving television broadcasting or radio broadcasting, comprising:

frequency-selecting means for selecting a plurality of frequencies not used by television broadcasting or radio broadcasting in an area where the house is located; and

receiving means for receiving a plurality of carrier waves which have the respective frequencies selected by the frequency-selecting means and have been transmitted from a second information terminal via the antenna terminal or the antenna cable, demodulating the carrier waves to produce reception data over a plurality of channels, and integrating the reception data over the plurality of channels into a single data set which is received by the first information terminal.

19. The network connection circuit according to claim 18, wherein at least one of frequencies for channels not used by the television broadcasting or radio broadcasting in an area where the house is located is automatically selected by the frequency-selecting means.